

IN THE CLAIMS

The following claims are provided as substitutes for the pending claim of the same number:

1. (currently amended) A method for the regeneration of a plant comprising the steps of:

- a) providing a plant zygotie embryo explant comprising a shoot meristem or primordia;
- b) culturing the zygotie embryo explant in a media comprising an apical dominance inhibitor selected from the group consisting of dikegulac, methyl laurate and octadecyl-polyethoxyethanol to induce ~~bud or~~ adventitious meristem shoot formation from the zygotie embryo explant to produce shoots; and
- c) rooting the ~~explants~~ shoots containing buds or resulting from said adventitious meristems ~~shoots~~ to produce a plant.

2. (original) The method of claim 1, wherein said media also contains an auxin or a cytokinin.

3. (original) The method of claim 2, wherein said auxin is IAA.

4. (original) The method of claim 2, wherein said cytokinin is BA or ZR.

5. (original) The method of claim 1, wherein said apical dominance inhibitor is dikegulac.

6. (original) The method of claim 5, wherein the dikegulac is a salt.

7. (original) The method of claim 5, wherein the dikegulac is a free acid.

8. (canceled)

9. (previously presented) The method of claim 5, wherein the dikegulac is present at a concentration from about 5 to about 5000 mg/L.

10. (original) The method of claim 9, wherein the dikegulac is present at a concentration from about 10 to about 1000 mg/L.

11. (original) The method of claim 1, wherein said plant is a dicotyledonous plant.

12. (original) The method of claim 11, wherein said plant is a cotton plant.

13. (canceled)

14. (original) The method of claim 11, wherein said plant is a soybean plant.

15. (canceled)

16. (canceled)

17. (canceled)

18. (previously presented) The method of claim 1, wherein the media is MS, MS/B5, GD1, Gamborg's media, WPM, modified LP, DKW, Nitsch and Nitsch media, or Schenk and Hildebrandt media.

19. (currently amended) A method for the regeneration of a transgenic plant comprising the steps of:

a) providing an explant of a plant comprising an embryo~~shoot meristem or primordia~~;

b) introducing a recombinant DNA vector into the ~~explant~~ embryo to generate a transformed ~~explant~~ embryo;

c) culturing the transformed embryo~~explant~~ in a media comprising an apical dominance inhibitor selected from the group consisting of dikegulac, methyl laurate and octadecyl-polyethoxyethanol to

induce adventitious meristem~~bud or shoot~~ formation from the transformed embryo~~explant~~ and producing transformed shoots therefrom; and

d) rooting the transformed explant ~~containing buds or shoots~~ to produce a transgenic plant.

20. (currently amended) A method for the regeneration of a transgenic plant comprising the steps of:

a) providing an embryo~~explant~~ of a plant comprising a shoot meristem or primordia;

b) culturing the embryo~~explant~~ in a media comprising an apical dominance inhibitor selected from the group consisting of dikegulac, methyl laurate and octadecyl-polyethoxyethanol to induce adventitious shoot meristem~~bud or shoot~~ formation from the embryo~~explant~~;

c) introducing a recombinant DNA vector into the explant~~embryo~~ to generate a transformed embryo~~explant~~ and producing transformed shoots therefrom; and

d) rooting the transformed explant ~~containing buds or shoots~~ to produce a transgenic plant.

21. (canceled)

22. (canceled)

23. (canceled)